

### AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A blood treatment device comprising:

a treating means that performs unit configured to perform a predetermined treatment to blood collected from a patient;

a measuring means that measures unit configured to measure at least one blood parameters parameter and indicates the to indicate a status of said blood of said patient;

a controlling means that controls unit configured to control at least one treatment conditions condition based on said blood parameters parameter measured using said measuring [[means]] unit;

a storing means that stores unit configured to store an ideal patient-specific blood parameter curve for a specific treatment duration, said ideal patient-specific blood parameter curve being obtained based on said blood parameter that is measured in real time in a blood treatment for said patient prior to said predetermined treatment of said patient; and

a directing means that compares unit configured to compare said ideal patient-specific blood parameter curve stored in said storing [[means]] unit with said blood parameters parameter measured with said measuring [[means]] unit, and that changes the to adjust a control from said controlling [[means]] unit so that said measured blood parameters parameter approximate to said ideal patient-specific blood parameter curve.

2. (Currently Amended) The blood treatment device of claim 1, wherein said blood parameter is a hematocrit value indicating either a blood concentration or a rate of change [[of]] in a circulating blood volume derived from said hematocrit value.

3. (Currently Amended) The blood treatment device of claim 1 wherein:

said treating [[means]] unit is ~~formed from~~ provided with a driving [[means]] unit for a blood purifying apparatus ~~that purifies~~ configured to purify said blood of said patient while extracorporeally circulating said blood; and

said at least one treatment condition controlled by said controlling [[means]] unit is selected from the group consisting of [:] a water removal rate, a blood flow rate, a fluid substitution rate, a concentration of a dialyzing fluid, a sodium ion concentration, a blood treatment duration, a flow rate of a dialyzing fluid, a temperature of a dialyzing fluid, a volume of a substitution fluid, an amount of a drug injected, and a rate of a drug injection, ~~or combinations thereof.~~

4. (Currently Amended) The blood treatment device of claim 1, wherein said ideal patient-specific blood parameter curve is corrected based on [[a]] said blood parameter measured by said measuring [[means]] unit at [[the]] a start of said predetermined [[blood]] treatment.

5. (Currently Amended) The blood treatment device of claim 1, wherein said directing ~~means varies a change in~~ unit adjusts said control of said controlling [[means]] unit based on a deviation between said ideal patient-specific blood parameter curve and said blood parameter measured by said measuring [[means]] unit.

6. (Currently Amended) The blood treatment device of claim 1, wherein said ideal patient-specific blood parameter curve stored in said storing [[means]] unit is an approximation equation

calculated from [[an]] said ideal patient-specific blood parameter curve obtained from ~~a previously performed said~~ blood treatment to said patient prior to said predetermined treatment to said patient.

7. (Currently Amended) The blood treatment device of claim 1, wherein, when said blood parameters parameter measured by said measuring ~~means undergo unit undergoes~~ an abrupt change, a direction to ~~change adjust~~ from said directing [[means]] unit is overridden in such a way as to suppress said abrupt change.

8. (Currently Amended) The blood treatment device of claim 1, wherein said at least one blood parameter includes said specific treatment duration is one of said parameters when said directing means directs said controlling means to change.

9. (Currently Amended) The blood treatment device of claim 1, wherein:  
an absolute base line is established against said blood parameters parameter; and  
said control adjusted by said directing [[means]] unit is overridden when said blood parameters fall parameter falls below said absolute base line.

10. (Canceled)

11. (Currently Amended) A blood treatment method using [[the]] a blood treatment device, comprising: having a treating means that performs  
performing a predetermined treatment to blood collected from a patient; [[a]]

measuring means that measures at least one blood parameters parameter and indicates the indicating a status of said blood of said patient; [[and a]]

controlling means that controls at least one treatment conditions condition based on said blood parameters parameter measured [[using]] in said measuring means, comprising the following steps:

obtaining an ideal patient-specific blood parameter curve prior to blood treatment that is specific to a treatment duration considered ideal for a particular said patient and that is based on said blood parameter measured in real time in a blood treatment to said patient prior to said predetermined treatment to said patient; and

directing to adjust changing the control of said controlling [[means]] when said treating means is to perform a said predetermined treatment for said particular patient is performed in said performing, so that said blood parameters parameter measured [[by]] in said measuring [[means]] approximate said ideal patient-specific blood parameter curve.

12. (Currently Amended) The blood treatment method of claim 11, wherein said blood parameter is a hematocrit value indicating either a blood concentration or a rate of change [[of]] in a circulating blood volume derived from said hematocrit value.

13. (Currently Amended) The blood treatment method of claim 11, wherein: said treating means is formed from a performing includes driving means for a blood purifying apparatus that purifies configured to purify said blood of said patient while extracorporeally circulating said blood; and

said at least one treatment condition controlled [[by]] in said controlling [[means]] is selected from the group consisting of [[:]] a water removal rate, a blood flow rate, a fluid substitution rate, a concentration of a dialyzing fluid, a sodium ion concentration, a blood treatment duration, a flow rate of a dialyzing fluid, a temperature of a dialyzing fluid, a volume of a substitution fluid, an amount of a drug injected, a rate of a drug injection, or combinations thereof.

14. (Currently Amended) The blood treatment method of claim 11, wherein said ideal patient-specific blood parameter curve is corrected based on said blood parameters parameter measured [[by]] in said measuring [[means]] at [[the]] a start of [[blood]] said predetermined treatment.

15. (Currently Amended) The blood treatment method of claim 11, wherein, in said further comprising a directing, means that varies a change in control of said controlling [[means]] is adjusted based on a deviation between said ideal patient-specific blood parameter curve and said blood parameter measured [[by]] in said measuring [[means]].

16. (Canceled)

17. (Currently Amended) The blood treatment method of claim 11, wherein, when said blood parameters parameter measured [[by]] in said measuring means undergo undergoes an abrupt change, a direction to change from adjust in said directing [[means]] is overridden in such a way as to suppress said abrupt change.

18. (Currently Amended) The blood treatment method of claim 17, wherein said directing means direction is overridden by said controlling [[means]], which changes the control adjusts to approximate the measured a hematocrit value, measured as said blood parameter in said measuring, to the ideal patient-specific blood parameter curve.

19. (Currently Amended) The blood treatment method of claim 11, wherein, said at least one blood parameter includes said treatment duration is one of said parameters when said directing means directs said controlling means to change is adjusted in said directing.

20. (Currently Amended) The blood treatment method of claim 11, wherein:  
an absolute base line is established against said blood parameters parameter; and  
a direction to adjust in control by said directing [[means]] is overridden when said blood parameters fall parameter falls below said absolute base line.

21. (Currently Amended) The blood treatment method of claim 20, wherein said directing means direction is overridden by said controlling [[means]], which changes the control direction to approximate the measured a hematocrit value, measured as said blood parameter in said measuring, to the ideal patient-specific blood parameter curve..